

REMARKS

Claims 1-8, 17-22, and 34-45 were pending in the present application. Claims 1, 6, 7, 17, and 21 have been amended. Claims 34-41 and 45 have been cancelled. New claims 46-55 have been added. Applicant believes that the present application is now in condition for allowance, which prompt and favorable action is respectfully requested.

Rejections of claims 1-8, 17-22, and 42-44 have been obviated by amendment

The Examiner has rejected claims 1-8, 17-22, and 42-44 under 35 U.S.C. 103(a) as being unpatentable over Welland (US Patent 6,137,372) in view of Binder (US Patent 5,892,408). In view of the amendments made to independent claims 1 and 17, upon which claims 2-8, 18-22, and 42-44 depend, it is respectfully submitted that the rejections are obviated.

Amended claim 1 recites a method for calibration comprising “synchronizing the phase of the first signal with the phase of the second signal during calibration.” Neither Welland nor Binder discloses such a limitation. As pointed out by the Examiner, Welland discloses a procedure for calibrating an oscillator within a frequency synthesizer. However, Welland does not disclose synchronizing the phase of the first signal with the phase of the second signal during calibration. Binder also does not disclose this limitation. Figs. 4-5 and col. 7/line57 to col. 8/line 25 from Binder cited by the Examiner disclose that the output signal from a VCXO 41 is compared to a scaled signal from a frequency reference 47. Binder does not disclose that the phases of these two signals are synchronized. Therefore, the references do not render the claimed invention obvious. As claims 2-8 and 42-44 depend on claim 1, they are allowable for at least the reasons given above.

Amended claim 17 and dependent claims 18-22 now also incorporate “wherein the circuitry... synchronizes the phase of the first signal with the phase of the second signal during calibration,” and are thus allowable for at least the reason given above.

Rejection of claim 4 respectfully traversed

The Examiner has rejected claim 4 under 35 U.S.C. 103(a) over Welland and Binder. Claim 4 recites “testing a voltage control input to the oscillator from the phase locked loop to determine whether calibration should be performed again.” Applicant respectfully submits that the portions of Welland cited by the Examiner do not disclose testing a voltage control input to determine the need to calibrate during operation. In fact, Welland explicitly discloses monitoring a different variable to determine this need: the *output frequency* of the oscillator. (Welland, col. 9 lines 49-54: “If desired, the discrete control 502 may continue to monitor the output frequency (fout) 102. If too great of an error is detected, discrete control 502 may move the switch (SW) 512 back to select initial control node 510 and again modify the digital control word (Bc) 404 based upon a desired procedure.”) Since neither Welland nor Binder discloses the claimed feature, the rejection of claim 4 is respectfully traversed.

New claims added

The Examiner’s attention is directed to newly added claims 46-55, which are fully supported by the specification and believed to be allowable over the art of record. Speedy examination and allowance of these claims are respectfully requested.

CONCLUSION

In light of the amendments and remarks contained herein, Applicant submits that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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